

# **JVR ENERGY PARK RESOURCE PROTECTION STUDY**

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**ATTACHMENT**

A Zoning Preliminary Floodplain Evaluation Resource Protection Study

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## **1 INTRODUCTION**

### **1.1 Resource Protection Ordinance (RPO) Background**

The County of San Diego Board of Supervisors have found that the unique topography, ecosystems and natural characteristics of San Diego County are fragile, irreplaceable resources that are vital to the general welfare of all residents; that special controls on development must be established for the County's wetlands, floodplains, steep slopes, sensitive biological habitats, and prehistoric and historic sites; and that present methods adopted by the County must be strengthened in order to guarantee the preservation of these sensitive lands. The Resource Protection Ordinance (RPO) protects sensitive lands and prevents their degradation and loss by requiring a Resource Protection Study for certain discretionary projects. The RPO is intended to preserve the ability of affected property owners to make reasonable use of their land subject to the conditions established by this ordinance. It is the intent of the RPO to increase the preservation and protection of the County's unique topography, natural beauty, diversity, and natural resources and a high quality of life for current and future residents of the County of San Diego. Nothing in the RPO is intended to be construed to reduce any requirements to protect environmentally sensitive lands contained in any other County plans, ordinances, policies, or regulations. It is not the intent of the ordinance to prohibit development on steep slopes, but only to limit the amount of disturbance consistent with the encroachment allowances.

### **1.2 Project Objective and Location**

The Applicant, JVR Energy Center, LLC, proposes to construct the JVR Energy Center (Proposed Project) with the objective to supply additional renewable energy within California. The Proposed Project site is located on 23 parcels in southeastern San Diego County, California, comprising approximately 1,345 acres of land. The Proposed Project would be located immediately east of the community of Jacumba Hot Springs and immediately north of the U.S./Mexico international border. The elevation ranges across the project site ranges from approximately 2,720 feet above mean sea level (AMSL) to approximately 3,360 feet AMSL. The Proposed Project site is surrounded by undeveloped lands, rural residential homes, the community of Jacumba Hot Springs and the Jacumba Airport. Primary access to the Proposed Project site would be provided via an improved access road from Carrizo Gorge Road, off of Interstate 8, as shown on Figure 1-1. Additional access points would be provided on both the north and south sides of Old Highway 80.

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### **2 PROJECT DESCRIPTION**

The Proposed Project area is approximately 1,345 acres in southeastern San Diego County (see Figure 1-1, Project Location). The Project area includes several public right-of-way (ROW) easements for Old Highway 80, as well as 500 feet of SDG&E easements, and an easement for the San Diego and Arizona Eastern Railway on the western edge of the project site. The proposed solar facility (the developable area) would cover approximately 691 acres within the Proposed Project area and would be set back an additional 90 feet from the 60-foot-wide strip of federal land along the U.S./Mexico border (see Figure 1-3). The solar generation facility would use photovoltaic (PV) single-axis tracker electric generation system technology to produce solar power at utility scale, including inverters, an on-site substation, and a battery energy storage facility capable of storing approximately 20 MWh of energy. The Proposed Project could produce up to 90 MW of solar power.

Figure 1-2 depicts the proposed project components. A Major Use Permit (MUP) is required to authorize a Major Impact Services and Utility Pursuant to Sections 1350, 2705, and 2926 of the San Diego County Zoning Ordinance. A comprehensive project description is included in the MUP submission (see Form 346S FF).

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### **3 ENVIRONMENTALLY SENSITIVE LANDS ANALYSIS**

#### **3.1 Steep Slope Lands**

##### **3.1.1 RPO Steep Slope Lands Definition**

The RPO, Section 86.602(p), defines Steep Slope Lands as:

All lands having a slope with natural gradient of 25% or greater and a minimum rise of 50 feet, unless said land has been substantially disturbed by previous grading. The minimum rise shall be measured vertically from the toe of slope to the top of slope within the project boundary.

According to Sec. 86.604, configuration on steep slope lands: “in all land use designations, parcels should be created in a manner, which minimizes encroachment onto steep slope lands. Where 10% or more of a lot contains steep slope lands, that portion of the lot containing such lands should be placed in an open space easement unless the lot is equal to or greater than 40 acres or a sensitive resource area designator has been applied to that lot pursuant to the Zoning Ordinance.” However, Sec. 86.604 does provide allowances for public and private utility systems that are not subject to the encroachment limitations set forth above, provided that findings are made that the least environmentally damaging alignment has been selected.

##### **3.1.2 RPO Slope Analysis**

The elevation range within the Proposed Project area is from 2,720 feet to 3,360 feet above mean sea level (AMSL). For the purpose of the slope analysis provided below, all lands within the full Proposed Project Area have been considered.

As shown on Figure 1-3 and quantified on Table 1, lands within the Proposed Project area include 134.4 acres (9.9%) exhibiting slopes greater than 25%. However, the proposed developable area avoids all steep slopes. There are no lands within the developable area that meet the definition of steep slopes, and there are no impacts being proposed upon steep slope areas.

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**Table 1  
Slope Categories**

Proposed Project area		
	<i>Acres</i>	<i>Percentage</i>
Total Proposed Project Area	1354.9	100%
Less than 15% slope	1101.3	81.3%
15% and greater up to 25% slope	119.2	8.8%
25% and greater up to 50% slope	87.7	6.5%
50% and greater slope	46.7	3.4%

### Requirements Related to RPO Steep Slope Lands

RPO Section 86.603(c) specifies action is required to protect sensitive lands (including RPO Steep Slope Lands). These actions include: (1) applying an open space easement to portions of the site that contain sensitive lands; (2) rezoning the entire site through the application of a special areas designator for sensitive lands; or (3) other actions as determined by the decision-making body.

### RPO Steep Slope Lands Encroachment

RPO Section 86.604(2) requires that in designing lot configuration on Steep Slope Lands in all land use designations, parcels shall be created in a manner that minimizes encroachment onto Steep Slope Lands. Where 10% or more of a lot contains Steep Slope Lands, that portion of the lot containing such lands shall be placed in an open space easement unless the lot is equal to or greater than 40 acres, or a sensitive resource area designator has been applied to that lot pursuant to the County Zoning Ordinance. RPO Section 86.604(2) specifies the maximum encroachment that may be permitted into Steep Slope Lands as shown in Table 2:

**Table 2  
RPO Steep Slope Encroachment Allowance**

Percentage of Lot in Steep Slope Lands	Maximum Encroachment Allowance as Percentage of Area in Steep Slope Lands
75% or less	10%
80%	12%
85%	14%
90%	16%
95%	18%
100%	20%

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RPO Section 86.604 (2)(bb) lists the following types of development that are allowed on Steep Slope Lands and are not subject to the encroachment limitations set forth above. These exceptions to RPO Steep Slope requirements are briefly summarized below:

- Public roads identified in the Circulation Element, community, or subregional plans
- Local public streets or private roads necessary for access to portions of the site to be developed on Steep Slope Lands of less than 25%
- Public and private utility systems
- Fire buffer areas
- Trails for passive recreational use
- Any lot created on or before August 10, 1988
- Any ongoing agricultural operation.

As shown on Figure 1-3 and summarized in Table 1, 134.4 acres (9.9%) of the Proposed Project area meet the RPO definition of steep slopes (25% gradient and minimum rise of 50 feet). Therefore the Proposed Project would not be required to minimize encroachment onto Steep Slope Lands as the project could not exceed the allowable encroachment of 10% or more of Steep Slope Lands within the Proposed Project area. In addition, the area proposed to be impacted by development (the developable area) avoids slopes greater than 25% almost completely, and avoids areas with slopes greater than 25% and with a minimum rise of 50 feet absolutely.

### **3.4 Floodplains**

#### **3.4.1 RPO Floodplains Definition**

The RPO, Section 86.602(j), defines Floodways as:

Land which meets the following criteria:

- The floodway shall include all areas necessary to pass the 100-year flood without increasing the water surface elevation more than 1 foot (or, in the case of San Luis Rey River, San Dieguito River, San Diego River, Sweetwater River, and Otay River, upon adoption by the Board of Supervisors of revised floodplain maps which so specify, the increase shall be no more than 2/10ths of 1 foot).
- The floodway shall include all land area necessary to convey a ten-year flood without structural improvements.

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- To avoid creating erosion and the need for channelization, rip-rap, or concrete lining, the floodway will not be further reduced in width when the velocity at the floodway boundary is six feet per second or greater.
- Floodways are determined by removing equal conveyance (capacity for passing flood flow) from each side unless another criterion controls.

Floodplain Fringe is defined as the area within the floodplain that is not in the floodway.

According to Sec. 86.604, permanent structures for human habitation or as a place of work are not permitted in a floodway. Uses permitted in a floodway are limited to agricultural, recreational, and other such low-intensity uses provided, however, uses that would substantially harm the environmental values of a particular floodway area are never permitted. Mineral resource extraction are permitted subject to an approved MUP and Reclamation Plan, provided that mitigation measures are required which produce any net gain in the functional wetlands and riparian habitat.

### **3.4.2 RPO Floodplains Analysis**

A floodplain study will be completed to determine whether floodplains onsite meet the RPO definition are present on site. The floodplain study will be completed concurrently with the CEQA process.

## **4 CONCLUSION**

Approximately 134.4 acres, or 9.9% of the Proposed Project area meet the RPO definition of steep slopes (25% gradient and minimum rise of 50 feet). However, the proposed developable area avoids steep slopes absolutely. Therefore the proposed project would not be required to minimize encroachment onto Steep Slope Lands as the project does not exceed encroachment into 10% or more of Steep Slope Lands within the Proposed Project area.

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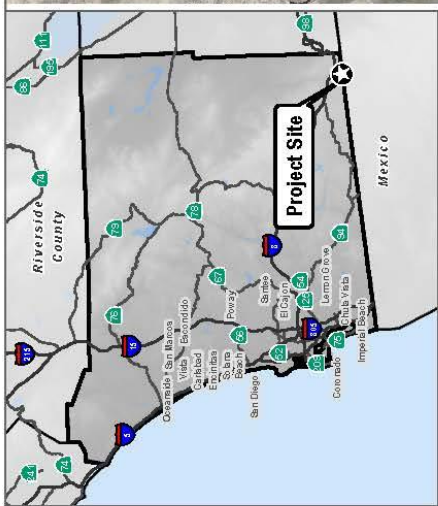
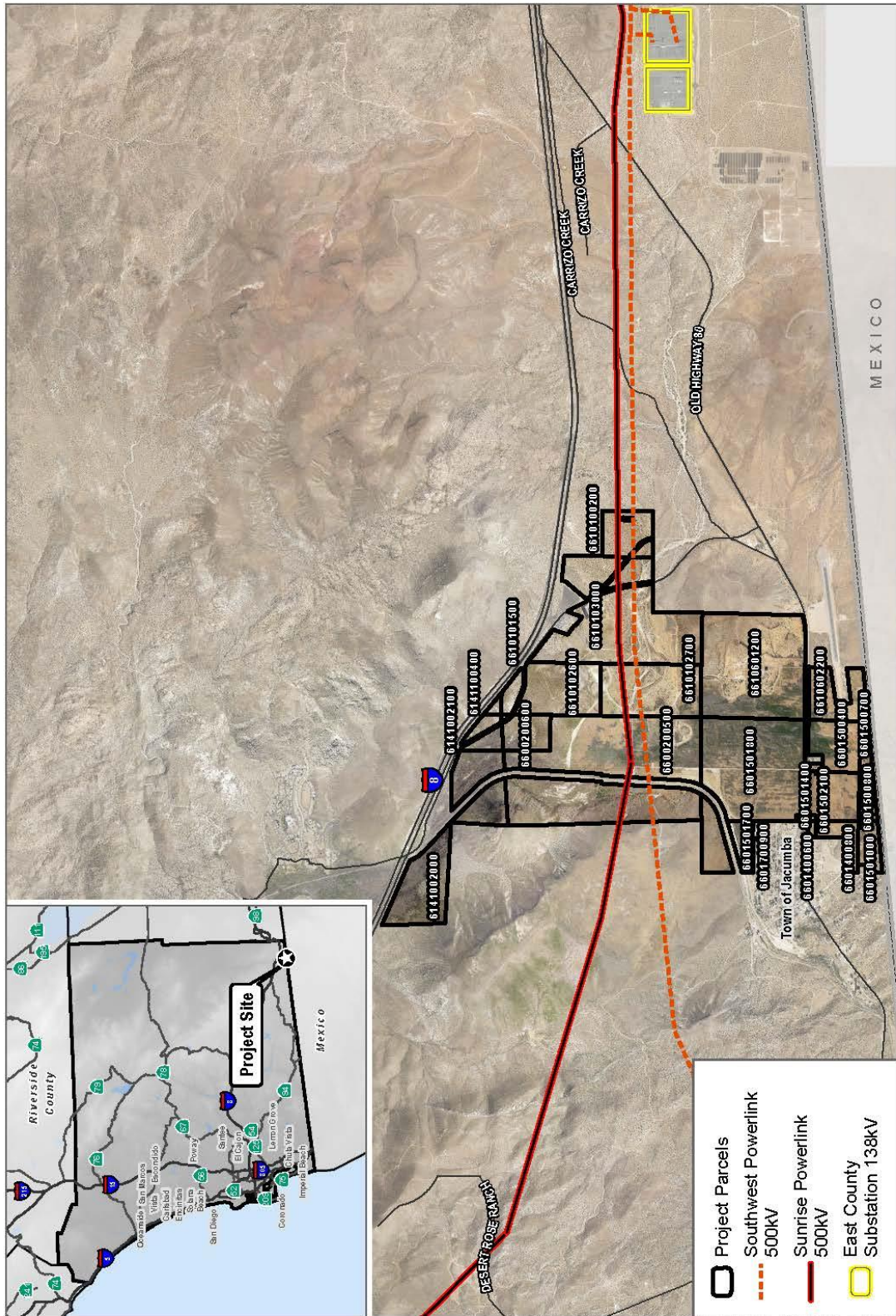
### **5 REFERENCES**

County of San Diego. 2011. Title 8 Zoning and Land Use Regulations, Division 6 Miscellaneous Land Use Regulations, Chapter 6, Resource Protection Ordinance. Amended by Ord. No. 10167. October 14, 2011.

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SOURCE: SANGIS 2017



**FIGURE 1-1**  
Project Location  
Jacumba Valley Ranch Solar Energy Project

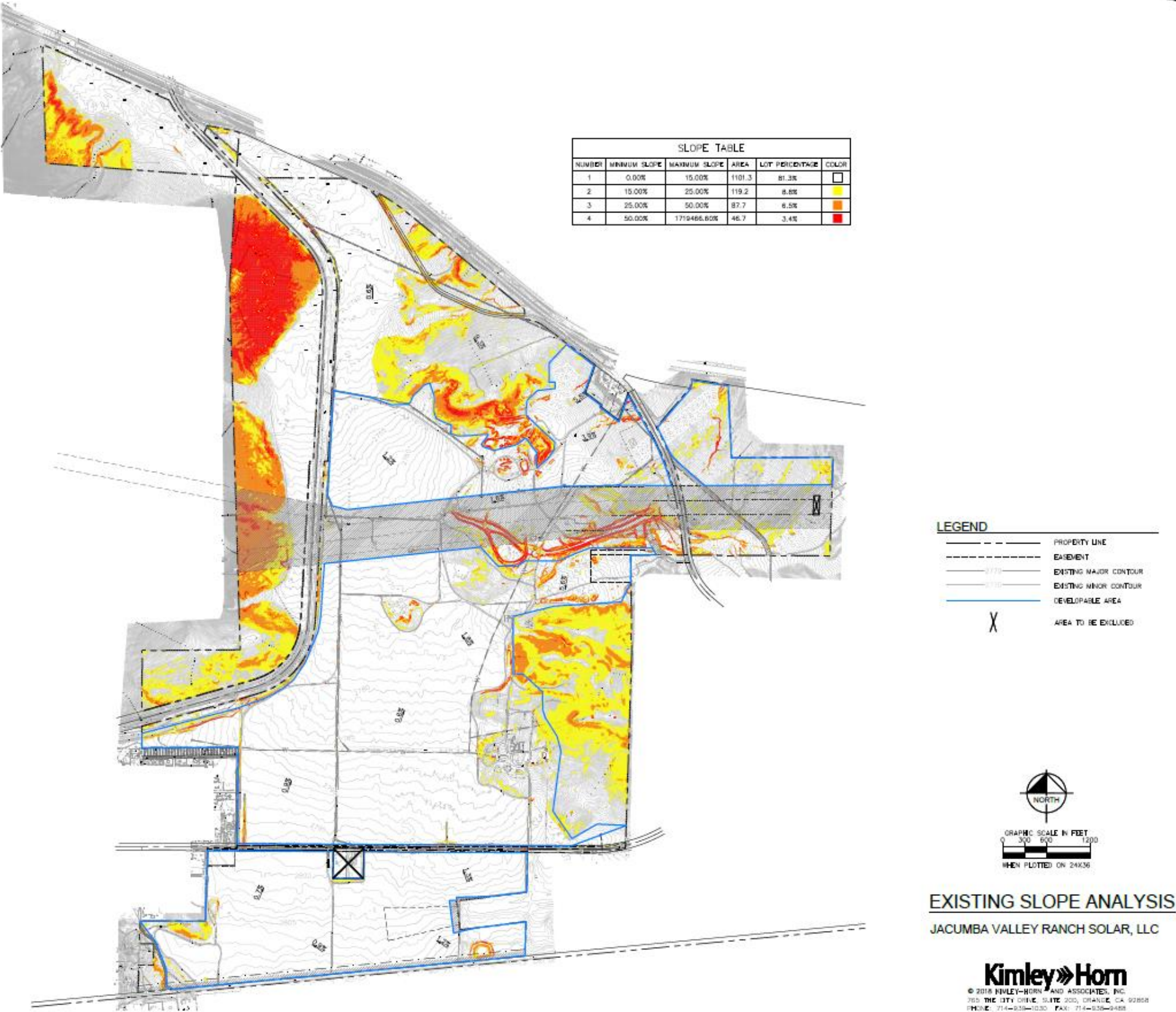
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October 2018





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# **ATTACHMENT A**

## ***Zoning Preliminary Floodplain Evaluation Resource Protection Study***